



1635 IPW

PTO/SB/21 (04-04)

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|--|----------------------|------------------------|-----------------|
| TRANSMITTAL FORM <small>(to be used for all correspondence after initial filing)</small> | Application Number | 09/432,503 | |
| | Filing Date | November 2, 1999 | |
| | First Named Inventor | Cech, Thomas R. | |
| | Art Unit | 1635 | |
| | Examiner Name | Jon E. Angell | |
| Total Number of Pages in This Submission | 9 | Attorney Docket Number | 015389-002611US |

| ENCLOSURES (Check all that apply) | | |
|---|---|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Communication Return Postcard |
| Remarks | | The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|--|
| Firm or Individual name | Townsend and Townsend and Crew LLP Scott L. Augenhuis Reg. No. 42,271 |
| Signature | |
| Date | October 5, 2004 |

| CERTIFICATE OF TRANSMISSION/MAILING | | | |
|--|-------------------|------|-----------------|
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Mail Stop Amendment, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. | | | |
| Typed or printed name | Janet L. Newmaker | | |
| Signature | | Date | October 5, 2004 |

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 180

Complete if Known

| | |
|----------------------|------------------|
| Application Number | 09/432,503 |
| Filing Date | November 2, 1999 |
| First Named Inventor | Cech, Thomas R. |
| Examiner Name | Jon E. Angell |
| Art Unit | 1635 |
| Attorney Docket No. | 015389-002611US |

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:
Deposit
Account
Number

20-1430

Deposit
Account
Name

Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1001 | 770 | 2001 | 385 | Utility filing fee | |
| 1002 | 340 | 2002 | 170 | Design filing fee | |
| 1003 | 530 | 2003 | 265 | Plant filing fee | |
| 1004 | 770 | 2004 | 385 | Reissue filing fee | |
| 1005 | 160 | 2005 | 80 | Provisional filing fee | |

SUBTOTAL (1)

(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims | | Extra Claims | | Fee from below | | Fee Paid |
|--------------------|--|--------------|--|----------------|--|----------|
| | | | | | | |
| Independent Claims | | ** = | | X | | |
| Multiple Dependent | | ** = | | X | | |

| Large Entity | | Small Entity | | Fee Description |
|--------------|----------|--------------|----------|--|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | |
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 |
| 1201 | 86 | 2201 | 43 | Independent claims in excess of 3 |
| 1203 | 290 | 2203 | 145 | Multiple dependent claim, if not paid |
| 1204 | 86 | 2204 | 43 | ** Reissue independent claims over original patent |
| 1205 | 18 | 2205 | 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2)

(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet. | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 420 | 2252 | 210 | Extension for reply within second month | |
| 1253 | 950 | 2253 | 475 | Extension for reply within third month | |
| 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth month | |
| 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | |
| 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1403 | 290 | 2403 | 145 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 1453 | 1,330 | 2453 | 665 | Petition to revive - unintentional | |
| 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reissue) | |
| 1502 | 480 | 2502 | 240 | Design issue fee | |
| 1503 | 640 | 2503 | 320 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Petitions related to provisional applications | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | 180 |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 770 | 2809 | 385 | Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 1801 | 770 | 2801 | 385 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |

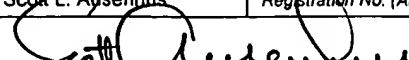
Other fee (specify) _____

*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$180

SUBMITTED BY

Complete (if applicable)

| | | | | | |
|-------------------|---|-----------------------------------|--------|-----------|-----------------|
| Name (Print/Type) | Scott L. Ausenhus | Registration No. (Attorney/Agent) | 42,271 | Telephone | 303-571-4000 |
| Signature |  | | | Date | October 5, 2004 |

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents
Mail Stop Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

On October 5, 2004

TOWNSEND and TOWNSEND and CREW LLP

By: Janet L. Newmaker
Janet L. Newmaker



PATENT
Attorney Docket No.: 015389-002611US
Client Reference No.: 018/063C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Thomas R. Cech et al.

Application No.: 09/432,503

Filed: November 2, 1999

For: INCREASING THE
PROLIFERATIVE CAPACITY OF
CELLS USING TELOMERASE
REVERSE TRANSCRIPTASE
(AMENDED)

Customer No.: 20350

Confirmation No.: 1130

Examiner: Jon E. Angell

Art Unit: 1635

COMMUNICATION

Commissioner for Patents
Mail Stop Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants enclose herewith a Supplemental Information Disclosure Statement. The enclosed IDS lists the same documents as cited in the IDS that was mailed on August 19, 2004.

Applicants request that the Examiner disregard the IDS submitted August 19, 2004, as the certification made in that statement was made in error. Applicants instead ask that the Examiner consider the enclosed replacement IDS and provide Applicants a marked off copy

of this IDS in the next communication from the Patent Office. The enclosed IDS authorizes the Patent Office to charge the \$180 IDS fee to Deposit Account No. 20-1430.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (303) 571-4000.

Respectfully submitted,



Scott L. Ausenhus
Reg. No. 42,271

Date: October 5, 2004

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 303-571-4321
SLA/jln
60324994 v1

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

PATENT
Attorney Docket No.: 015389-002611US
Client Reference No.: 018/063C

Commissioner for Patents
Mail Stop Amendment
P.O. Box 1450
Alexandria, VA 22313-1450



On October 5, 2004

TOWNSEND and TOWNSEND and CREW LLP

By: Janet L. Newmaker
Janet L. Newmaker

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

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REVERSE TRANSCRIPTASE
(AMENDED)

Customer No.: 20350

Confirmation No.: 1130

Examiner: Jon E. Angell

Art Unit: 1635

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98

Commissioner for Patents
Mail Stop Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are not enclosed as they were previously submitted with the Information Disclosure Statement dated August 19, 2004.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

The Commissioner is hereby authorized to deduct the \$180 fee for submission of an Information Disclosure Statement after issuance of an Office Action from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Scott L. Ausenhus
Reg. No. 42,271

Date: October 5, 2004

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 303-571-4321
SLA/jln



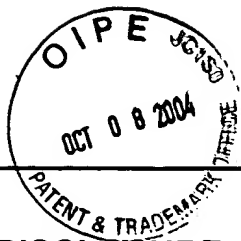
| | | | | | |
|---|---|--------------------------|------------------|------------------------|-----------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | 09/432,503 | | |
| | | Filing Date | November 2, 1999 | | |
| | | First Named Inventor | Cech, Thomas R. | | |
| | | Art Unit | 1635 | | |
| | | Examiner Name | Jon E. Angell | | |
| Sheet | 1 | of | 2 | Attorney Docket Number | 015389-002611US |

| U.S. PATENT DOCUMENTS+ | | | | | |
|------------------------|--------------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number Kind Code ² (if known) | | | |
| | | | | | |
| | | | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------------|--------------------------|---------------------------|---------------------|-----------------------------------|--------------------------------|---|--|--------------------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| | | | | | | | | <input type="checkbox"/> |
| | | | | | | | | <input type="checkbox"/> |

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|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



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|---|---|----|--------------------------|------------------------|-----------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | | Complete if Known | | |
| | | | Application Number | 09/432,503 | |
| | | | Filing Date | November 2, 1999 | |
| | | | First Named Inventor | Cech, Thomas R. | |
| | | | Art Unit | 1635 | |
| | | | Examiner Name | Jon E. Angell | |
| Sheet | 2 | of | 2 | Attorney Docket Number | 015389-002611US |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|--------------------------|---|----------------|
| Examiner Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | C1 | CAMPBELL, KEITH & WILMUT, IAN "Totipotency or Multipotentiality of Cultured Cells: Applications and Progress" Theriogenology, January 1997, pp. 63-72, Vol. 47, Issue 1, Elsevier Science Inc. | |
| | C2 | GEARHART, JOHN "New Potential for Human Embryonic Stem Cells" Science, November 6, 1998; pp. 1061-1062, Vol. 282, Issue 5391. | |
| | C3 | THOMSON, JAMES A. et al. "Embryonic Stem Cell Lines Derived from Human Blastocysts" Science, November 6, 1998; pp. 1145-1147, Vol. 282, Issue 5391. | |
| | | | |

60286303 v2

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.